

# PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference  FAP-3881		FOR FURTHER ACTIO	FOR FURTHER ACTION See Form I					
Internation	nal application No.	International filing date (de	y/month/year) Pri	iority date (day/month/year)				
PCT/JP2004/005378		15.04.2004	1	16.04.2003				
Internation	nal Patent Classification (IPC) or	national classification and IPC						
Applicant BRIDGESTONE CORPORATION								
	<ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>							
2.	This REPORT consists of a total	of 5	sheets, including this cover sheet.					
3.	This report is also accompanied b	y ANNEXES, comprising:						
	a. (sent to the applicant	and to the International Bureau	a total of	sheets, as follows:				
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).							
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental							
1	Box.			ما مسمون مستوسما				
	b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))							
	, containing a sequence listing and/or tables							
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).								
4.	This report contains indications r	lating to the following items:						
	Box No. I Basis o	the report						
	Box No. II Priority							
	Box No. III Non-est	ablishment of opinion with rega	rd to novelty, inventive s	step and industrial applicability				
	Box No. IV Lack of	unity of invention						
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
	Box No. VI Certain documents cited							
	Box No. VII Certain defects in the international application							
	Box No. VIII Certain	observations on the internationa	l application					
Date of su	bmission of the demand	Date	of completion of this re	port .				
Name and mailing address of the IPEA/JP		Aut	Authorized officer					
Facsimile No.		Tele	phone No.					

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/005378

Box	No. I	Basis of the report					
1.		d to the language, this report is based on the internationander this item.	al application in the language in which it	was filed, unless otherwise			
	1 1 .	report is based on translations from the original languag		,			
	which is the language of a translation furnished for the purposes of:						
	H	international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4)					
	一片	international preliminary examination (Rule 55.2 and/o	r 55 3)				
2.	With regar	d to the elements of the international application, this n		ich have been furnished to the			
	receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):						
		nternational application as originally filed/furnished					
		lescription:					
	page			as originally filed/furnished			
	page			,			
			received by this Authority on	<del></del>			
	page						
	the c	laims:					
	nos.			as originally filed/furnished			
	nos.*		as amended (together with an	y statement) under Article 19			
	nos.*		received by this Authority on				
	nos.*	•	received by this Authority on				
	the d	trawings:					
	sheet	ts		as originally filed/furnished			
	sheet	ts*	received by this Authority on				
İ	sheet	ts*	received by this Authority on				
	a seq	quence listing and/or any related table(s) - see Suppleme	ntal Box Relating to Sequence Listing.				
3	The	amendments have resulted in the cancellation of:					
-		the description, pages					
	$\Box$	the claims, nos.					
	一						
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		any table(s) related to sequence listing (specify):					
4.	☐ This	report has been established as if (some of) the amendr	nents annexed to this report and listed be	elow had not been made since			
~		have been considered to go beyond the disclosure as file					
		the description, pages					
		the claims, nos.					
	the drawings, sheets/figs						
		the sequence listing (specify):					
	any table(s) related to sequence listing (specify):						
	If item 4 a	pplies, some or all of those sheets may be marked "supe	rseded."				

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
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citations and explanations supporting such statement					
Statement					
Novelty (N)	Claims	2, 4-9, 11	YES		
	Claims	1, 3, 10, 12-14	NO		
Inventive step (IS)	Claims		YES		
	Claims	1-14	NO		
Industrial applicability (IA)	Claims	1-14	YES		
	Claims		NO		
	Statement  Novelty (N)  Inventive step (IS)	Statement  Novelty (N)  Claims  Claims  Inventive step (IS)  Claims  Claims  Claims  Claims  Claims  Claims	Statement   Statement		

#### 2. Citations and explanations (Rule 70.7)

Document 1: JP 60-059063 A (Clarion Co., Ltd.), 05 April 1985

Document 2: JP 01-123067 A (Nihon Kentetsu Co., Ltd.), 16
May 1989

Document 3: JP 07-150356 A (Canon Inc.), 13 June 1995

# Claims 1 and 3

The inventions set forth in claims 1 and 3 lack novelty in the light of document 1 cited in the international search report. Document 1 (claims) discloses a method for the production of a porous thin film by simultaneously sputtering a desired material and a metal material in order to form a mixed thin film, and thereafter removing only the metal material from the resulting mixed thin film by means of a plasma etching process. Therein, it is possible to infer that the porous thin film is configured from a ceramic material in the light of the applications that are disclosed therefor in document 1.

## Claim 2

The invention set forth in claim 2 does not involve an inventive step in the light of document 1 cited in the

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

international search report. The invention that is disclosed in document 1 employs a composite target; however, it would have been easy for a person skilled in the art to conceive of using two targets of different types.

# Claims 10 and 12 to 14

The inventions set forth in claims 10 and 12 to 14 lack novelty in the light of document 2 cited in the international search report. Document 2 (examples) discloses a method for the production of a porous platinum film by sputtering a target that comprises both platinum and aluminum in order to form a mixed thin film, and thereafter immersing the resulting mixed thin film in an alkali solution in order to remove only the aluminum therefrom by means of elution.

### Claim 11

The invention set forth in claim 11 does not involve an inventive step in the light of document 2 cited in the international search report. The invention that is disclosed in document 2 employs a composite target; however, it would have been easy for a person skilled in the art to conceive of using two targets of different types.

#### Claims 4 to 9

The inventions set forth in claims 4 to 9 do not involve an inventive step in the light of document 1 and document 2 cited in the international search report. In the light of the inventions that are disclosed in document 1 and document 2, it would have been easy for a

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

person skilled in the art to conceive of producing a porous thin film by forming a mixed coating film that comprises a metal component (aluminum, zinc or the like) and a ceramic component, and thereafter immersing the resulting mixed coating film in an acidic solution or an alkali solution in order to remove the metal component therefrom by means of elution. In addition, a person skilled in the art could select Ti for use as the material that constitutes the ceramic component, as appropriate, with consideration of the material that should ultimately constitute the porous thin film. Furthermore, it would have been easy for a person skilled in the art to conceive of baking the porous ceramic film after removing the metal component by means of elution in an acidic solution or an alkali solution.